

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A tire molding machine ~~comprising~~ comprising:
_____ a pair of bead core supporting devices ~~for supporting~~ configured to support
 respective bead rings arranged on a radially outer side of a carcass band and axially spaced by
 a predetermined distance from each ~~other~~ other; and
_____ a molding drum including a bead lock ~~section~~ section configured to radially
expanding expand those portions of the carcass band, ~~which~~ that are situated on a radially
 inner side of the bead cores so as to urge the carcass band against the bead cores, ~~said tire~~
~~molding machine being so designed that~~ at least one of the bead cores ~~has~~ having a center
 axis with a controllable inclination angle, wherein:
_____ at least one of ~~said the~~ the bead core supporting devices, ~~which~~ that is ~~capable of~~
holding configured to hold ~~the bead core to have a center axis with a controllable inclination~~
~~angle,~~ the at least one of the bead cores, comprises
_____ an annular upright ~~plate~~ plate;
_____ a bead holder ring secured to the annular upright ~~plate~~ plate; and
_____ a bead holder ring posture control ~~means for controlling~~ portion
configured to control an inclination angle of a center axis of the bead holder ring relative to
 the annular upright plate, ~~within an angular range including zero degree,~~ wherein ~~said the~~
 bead holder ring ~~serves to hold~~ is configured to hold the bead core in parallel with a surface of
 the ~~ring~~ ring, the bead holder ring posture control portion is configured to control the
inclination angle of the center axis of the bead holder ring in two different directions, the bead
holder ring posture control portion comprising:

spherical bearings arranged at not less than two locations on the
bead holder ring, linear motion shafts each extending in a direction perpendicular to the
annular upright plate and having a tip end that is pivotally connected to the bead holder ring
in omni-directional manner by the spherical bearing; and
shaft moving portion configured to move the linear motion
shafts to desired positions in an axial direction of the annular upright plate.

2. (Canceled)

3. (Canceled)

4. (Currently Amended) ~~The tire molding machine according to Claim 1,~~ A tire
molding machine comprising:

a pair of bead core supporting devices configured to support respective bead
rings arranged on a radially outer side of a carcass band and axially spaced by a
predetermined distance from each other; and

a molding drum including a bead lock section configured to radially expand
those portions of the carcass band that are situated on a radially inner side of the bead cores so
as to urge the carcass band against the bead cores, at least one of the bead cores having a
center axis with a controllable inclination angle, wherein:

at least one of the bead core supporting devices, that is configured to hold the
at least one of the bead cores, comprises:

an annular upright plate;

a bead holder ring secured to the annular upright plate; and

a bead holder ring posture control portion configured to control an
inclination angle of a center axis of the bead holder ring relative to the annular upright plate,
wherein the bead holder ring is configured to hold the bead core in parallel with a surface of

~~the ring wherein, said the~~ bead holder ring posture control ~~means portion comprises~~
comprising:

_____ spherical bearings arranged at not less than two locations on the
bead holder ring, linear motion shafts each extending in a direction perpendicular to the
annular upright plate and having a tip end ~~which that~~ is pivotally connected to the bead holder
ring in omni-directional manner by the spherical ~~bearing, and bearing; and~~
_____ shaft moving ~~means portion for moving~~ configured to move the
linear motion shafts to desired positions in an axial direction of the annular upright plate.

5. (Currently Amended) The tire molding machine according to Claim 4,
wherein ~~said the~~ linear motion shaft comprises a ball screw rod engaged with a female screw
in the annular upright plate, ~~said the~~ shaft moving ~~means portion~~ comprises a servomotor
with a reduction ~~means portion, for rotating~~ configured to rotate the ball screw rod directly or
indirectly through a gear mechanism, and ~~said the~~ annular upright plate is axially slidably
provided with a ball spline or a support shaft, ~~said the~~ ball spline or support shaft having a tip
end ~~which that~~ is pivotally connected to the bead holder ring in omni-directional manner, by a
spherical bearing provided on the bead holder ring.

6. (Currently Amended) The tire molding machine according to Claim 1,
wherein ~~said the~~ bead core supporting device is movable in ~~an axial~~ the axial direction of the
molding drum.

7. (Canceled)

8. (Currently Amended) ~~The tire molding machine according to Claim 3, A tire~~
molding machine comprising:

_____ a pair of bead core supporting devices configured to support respective bead
rings arranged on a radially outer side of a carcass band and axially spaced by a
predetermined distance from each other; and

a molding drum including a bead lock section configured to radially expand those portions of the carcass band that are situated on a radially inner side of the bead cores so as to urge the carcass band against the bead cores, at least one of the bead cores having a center axis with a controllable inclination angle, wherein:

at least one of the bead core supporting devices, that is configured to hold the at least one of the bead cores, comprises:

an annular upright plate;

a bead holder ring secured to the annular upright plate; and

a bead holder ring posture control portion configured to control an inclination angle of a center axis of the bead holder ring relative to the annular upright plate, wherein the bead holder ring is configured to hold the bead core in parallel with a surface of the ring, both of the bead core supporting devices comprise respective bead holder ring posture control portion, the bead holder ring posture control portion each configured to control the inclination angle of the center axis of the bead holder ring in a single direction, the angular control directions being different from each other among the respective bead core holder rings~~wherein, said the bead holder ring posture control means portion comprises comprising:~~

spherical bearings arranged at not less than two locations on the bead holder ring, linear motion shafts each extending in a direction perpendicular to the annular upright plate and having a tip end ~~which~~ that is pivotally connected to the bead holder ring in omni-directional manner by the spherical bearing, ~~and;~~ and

shaft moving ~~means portion for moving~~ configured to move the linear motion shafts to desired positions in an axial direction of the annular upright plate.

9. (Currently Amended) The tire molding machine according to ~~Claim 7~~ Claim 1, wherein ~~said the~~ linear motion shaft comprises a ball screw rod engaged with a female screw

in the annular upright plate, ~~said-that~~ shaft moving means-portion comprises a servomotor with a reduction ~~means, for rotating~~ portion configured to rotate the ball screw rod directly or indirectly through a gear mechanism, and ~~said-the~~ annular upright plate is axially slidably provided with a ball spline or a support shaft, ~~said-the~~ ball spline or support shaft having a tip end ~~which-that~~ is pivotally connected to the bead holder ring in omni-directional manner, by a spherical bearing provided on the bead holder ring.

10. (Currently Amended) The tire molding machine according to Claim 8, wherein ~~said-the~~ linear motion shaft comprises a ball screw rod engaged with a female screw in the annular upright plate, ~~said-the~~ shaft moving means-portion comprises a servomotor with a reduction ~~means, for~~ portion configured to rotating-rotate the ball screw rod directly or indirectly through a gear mechanism, and ~~said-the~~ annular upright plate is axially slidably provided with a ball spline or a support shaft, ~~said-the~~ ball spline or support shaft having a tip end ~~which-that~~ is pivotally connected to the bead holder ring in omni-directional manner, by a spherical bearing provided on the bead holder ring.

11. (Currently Amended) The tire molding machine according to ~~Claim-2~~ Claim 1, wherein ~~said-the~~ bead core supporting device is movable in ~~an-axial~~ the axial direction of the molding drum.

12. (Currently Amended) The tire molding machine according to ~~Claim-3~~ Claim 8, wherein ~~said-the~~ bead core supporting device is ~~movable~~ configured to move in ~~an-axial~~ the axial direction of the molding drum.

13. (Currently Amended) The tire molding machine according to Claim 4, wherein ~~said-the~~ bead core supporting device is ~~movable~~ configured to move in ~~an-axial~~ the axial direction of the molding drum.

14. (Currently Amended) The tire molding machine according to Claim 5, wherein ~~said~~ the bead core supporting device is ~~movable~~ configured to move in ~~an axial~~ the axial direction of the molding drum.

15. (Currently Amended) The tire molding machine according to ~~Claim 7~~ Claim 1, wherein ~~said~~ the bead core supporting device is movable in ~~an axial~~ the axial direction of the molding drum.

16. (Currently Amended) The tire molding machine according to Claim 8, wherein ~~said~~ the bead core supporting device is movable in ~~an axial~~ the axial direction of the molding drum.

17. (Currently Amended) The tire molding machine according to Claim 9, wherein ~~said~~ the bead core supporting device is movable in ~~an axial~~ the axial direction of the molding drum.

18. (Currently Amended) The tire molding machine according to Claim 10, wherein ~~said~~ the bead core supporting device is movable in ~~an axial~~ the axial direction of the molding drum.